

Information Retrieval

Design and Sources

Roslina Othman



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INFORMATION RETRIEVAL: DESIGN AND SOURCES

Editor

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15. MORPHOLOGICAL ANALYSIS FOR RETRIEVAL OF DOCUMENTS IN ARABIC LANGUAGE

Roslina Othman and Ouahiba Saoudi

ABSTRACT

This chapter introduces the application of morphological analysis (MA) as one of the stemming strategies for retrieval of Arabic Language documents. Morphological analysis is a computational process that analyses words by considering their internal structure. This strategy made considerable improvement in Arabic Information retrieval (AIR). Many studies suggest that MA has improved the effective of IR for Arabic Language. Its application in many other Languages made it possible to adopt it to Arabic taking into account its complexity, characteristics and rules. The main objective of this paper is to highlight the works which examined the significance of MA in improving AIR. The paper uses textual analysis and library research to survey selected major works on the importance of MA. Without indulging in the details of the studies which examined MA, this paper showed its significance in improving recall and precision in AIR. Hence, it suggests that there is a need to further develop this strategy with more new applications to Arabic language.

15.1 Introduction

Obviously, Arabic language is one of the world languages used by millions of people not only in the Arab speaking world, but also in many other non-Arabic speaking Muslim countries ('Amayrah, 1984). Indeed, the interest in this language and its place in the life of Muslim emanates